

3 hours 30 minutes

SESSION VI

DRUG CATEGORIES AND THEIR OBSERVABLE EFFECTS

SESSION VI: DRUG CATEGORIES AND THEIR OBSERVABLE EFFECTS

Upon successfully completing this session, the participant will be better able to:




- o Identify the indicators of impairment associated with each category.
- o Describe the expected results of roadside observations/indicators of impairment.
- o Describe the general indicators that may be present for each drug category.



CONTENT SEGMENTS




- A. CNS Depressants
- B. CNS Stimulants
- C. Hallucinogens
- D. Dissociative Anesthetics
- E. Narcotic Analgesics
- F. Inhalants
- G. Cannabis
- H. Drug Combinations
- I. Medically Impaired Person



LEARNING ACTIVITIES

- o Instructor-Led Presentations

Aids	Lesson Plan	Instructor Notes
<div data-bbox="232 283 302 352"></div> <div data-bbox="191 373 373 405">210 Minutes</div> <div data-bbox="224 426 290 491"></div> <div data-bbox="191 512 357 543">30 Minutes</div> <div data-bbox="199 699 363 787"></div> <div data-bbox="191 827 305 894">Display VI-1</div> <div data-bbox="191 1877 386 1908">HS 178B R2/06</div>	<div data-bbox="428 304 911 371">DRUG CATEGORIES AND THEIR OBSERVABLE EFFECTS</div> <div data-bbox="428 443 753 474">A. CNS Depressants</div> <div data-bbox="464 688 932 825">CNS Depressants slow down the operation of the Central Nervous System, (i.e., the brain, brain stem and spinal cord).</div> <div data-bbox="464 934 948 1770"> <ol style="list-style-type: none"> 1. The most familiar CNS Depressant is alcohol. 2. Other CNS Depressants include: <ol style="list-style-type: none"> a. Barbiturates (Derivatives of barbituric acids) (GHB - Gama-Hydroxy Butarate) b. Anti anxiety tranquilizers (such as Valium, librium, and xanax) c. Rohypnol d. Many other drugs 3. In general, people under the influence of CNS Depressants look and act much like people under the influence of alcohol. </div> <div data-bbox="784 1877 837 1908">VI-1</div>	<div data-bbox="1000 443 1437 648"><u>THIS SESSION IS ON A VERY COMPACT TIME SCHEDULE. THEREFORE, IT IS IMPERATIVE THAT YOU DO NOT EMBELLISH THE MATERIAL PROVIDED.</u></div> <div data-bbox="1000 688 1414 858"><u>Point out</u> that alcohol remains the most familiar drug. In 2002, 51 percent of persons aged 12 or older were current drinkers.</div>

Aids	Lesson Plan	Instructor Notes
 <p>Display VI-2</p>	<p>4. Expected Results of Roadside Observations/Indicators of impairment.</p> <ul style="list-style-type: none"> a. Psychophysical <ul style="list-style-type: none"> (1) Divided attention impairment. (2) Poor coordination and balance. (3) Slowed internal clock. b. Eye Indicators of CNS Depressant Influence: <ul style="list-style-type: none"> o HGN usually will be present. o Vertical nystagmus will be present (with high doses for that individual). o Pupil size usually will be normal. o Eye lids may be droopy and eyes watery. c. Methods of ingestion: <ul style="list-style-type: none"> (1) Oral (2) Injection 	
 <p>Display VI-3</p>		<p>Point out that most depressants are taken in pill or capsule form.</p> <p>Barbiturates are sometimes injected.</p>
HS 178B R2/06	VI-2	

Aids	Lesson Plan	Instructor Notes
 <p>Display VI-3A</p>	<p>d. General indicators that may be present:</p> <ul style="list-style-type: none"> (1) Drowsy (2) Thick, slurred speech (3) Uncoordinated, fumbling (4) Flaccid muscle tone (5) Sluggish <p>e. Other conditions that may cause similar symptoms:</p> <ul style="list-style-type: none"> (1) Extreme fatigue (2) Head injury (3) Hypotension (4) Severe depression (5) Diabetic reaction (6) Inner ear disorders 	
 <p>30 Minutes</p>	<p>B. CNS Stimulants</p>	
 <p>Display VI-4</p>	<p>CNS Stimulants speed up the operation of the central nervous system, and of the various bodily functions controlled by the Central Nervous System.</p> <ul style="list-style-type: none"> 1. The two most widely abused CNS Stimulants are cocaine and amphetamines. 2. Cocaine is made from the leaves of the coca plant. 3. Amphetamines are synthetically produced (manufactured) drugs. 4. People under the influence of CNS Stimulants tend to be hyperactive, indicated by 	<p>Abnormally low blood pressure.</p> <p>Solicit students questions concerning indicators of CNS Depressant influence.</p> <p>Amphetamines also include the unlawful production of methamphetamine or crank.</p>
<p>HS 178B R2/06</p>	<p>VI-3</p>	




Aids	Lesson Plan	Instructor Notes
 Display VI-7	<p>c. Methods of ingestion:</p> <ul style="list-style-type: none"> (1) Smoking (2) Snorting (3) Injecting (4) Orally <p>d. General indicators of CNS Stimulant influence that may be present:</p> <ul style="list-style-type: none"> (1) Restlessness (2) Anxiety (3) Euphoria (4) Talkative (5) Excitation (6) Grinding teeth (bruxism) (7) Body tremors (8) Runny nose (if snorting) (9) Redness to nasal area (If snorting) (10) Exaggerated reflexes (11) Loss of appetite <p>e. Other conditions that may cause symptoms similar to stimulant influence:</p> <ul style="list-style-type: none"> (1) Hyperactivity (2) Nervousness (3) Stress (4) Fear (5) Hypertension 	<p>Cocaine and Methamphetamine can be smoked - "crack cocaine" or "ice".</p> <p>Point out that all stimulants may be injected.</p> <p>Typically amphetamines are taken in pill or capsule form.</p>
 Display VI-7A		<p>Solicit students questions concerning indicators of CNS Stimulant influence</p>
HS 178B R2/06	VI-5	



Aids	Lesson Plan	Instructor Notes
<div data-bbox="224 321 289 388"></div> <div data-bbox="191 409 354 441">30 Minutes</div> <div data-bbox="207 489 370 573"></div> <div data-bbox="191 619 305 682">Display VI-8</div> <div data-bbox="191 762 354 846"></div> <div data-bbox="191 867 305 930">Display VI-9</div> <div data-bbox="215 1276 378 1360"></div> <div data-bbox="191 1386 305 1449">Display VI-10</div> <div data-bbox="191 1879 386 1911">HS 178B R2/06</div>	<div data-bbox="430 304 711 336">C. Hallucinogens</div> <div data-bbox="462 478 941 615"> <p>Hallucinogens are drugs that cause hallucinations, i.e. they cause the user to perceive things differently from the way that they really are.</p> </div> <div data-bbox="462 724 941 1806"> <ol style="list-style-type: none"> 1. One common type of hallucination caused by these drugs is called synesthesia, which means a transposition of sensory modes: <ol style="list-style-type: none"> a. Sounds, for example, may be transposed into sights. b. Sights, for example, may be transposed into odors. 2. Some hallucinogenic drugs come from natural sources. <ol style="list-style-type: none"> a. Peyote is a hallucinogen found in a particular specie of cactus. b. Psilocybin is a hallucinogen found in a number of species of mushrooms. 3. Other hallucinogens are synthetically manufactured. <ol style="list-style-type: none"> a. LSD (Lysergic Acid Diethylamide) </div>	<div data-bbox="1003 478 1430 583"> <p>An hallucination is a sensory experience of something that does not exist outside the mind.</p> </div> <div data-bbox="1003 972 1430 1213"> <p>Example: The user may see a flash of color whenever the telephone rings.</p> <p>Example: The user may smell a particular fragrance when he or she looks at something red.</p> </div>

Aids	Lesson Plan	Instructor Notes
<div data-bbox="209 627 375 716" data-label="Image"> </div> <p data-bbox="191 758 305 821">Display VI-11</p>	<p data-bbox="516 306 878 338">b. MDMA ("X" or ecstasy)</p> <p data-bbox="516 380 737 411">c. many others</p> <p data-bbox="464 447 930 583">4. Persons under the influence of hallucinogens are usually extremely impaired and may exhibit bizarre behavior.</p> <p data-bbox="464 621 911 726">5. Expected Results of Roadside Observations/Indicators of Impairment:</p> <p data-bbox="516 762 773 793">a. Psychophysical</p> <ul data-bbox="566 867 948 1245" style="list-style-type: none"> - Uncoordinated - Severe divided attention impairment - Poor perception of time and distance - Poor balance - Distorted internal clock <p data-bbox="516 1287 886 1350">b. Eye Indicators of Hallucinogen influence:</p> <p data-bbox="566 1392 948 1497">(1) Neither Horizontal or Vertical Nystagmus will be present</p> <p data-bbox="566 1535 927 1598">(2) The pupils usually will be noticeably dilated.</p>	<p data-bbox="1003 621 1430 758">Point out that the indicators of hallucinogenic influence are very similar to the indicators of CNS Stimulant influence.</p>

Aids	Lesson Plan	Instructor Notes
	<p data-bbox="565 304 951 441">“DXM” and is an ingredient found in numerous over-the-counter cough and cold remedies.</p> <ol style="list-style-type: none"> <li data-bbox="565 478 951 651">(1) DXM is a synthetically produced substance that is chemically related to Codeine, although it is not an opiate. <li data-bbox="565 688 951 1039">(2) When ingested in recommended dosage levels, DXM generally is a safe and highly effective cough suppressant; however, when ingested in large amounts, it produces negative physiological effects. <li data-bbox="565 1077 951 1281">(3) Street names for Dextromethorphan include: “DXM”, “robo tripping”, “Skittles”, “Triple C”, “Robo dosing”, “DM”, “robo” <li data-bbox="565 1318 951 1491">(4) DXM abusers normally ingest the drug orally, although some snort the pure powdered form of the drug. 	

Aids	Lesson Plan	Instructor Notes
<div data-bbox="207 919 370 1003" data-label="Image"> </div> <div data-bbox="191 1039 305 1102" data-label="Caption"> <p>Display VI-15A</p> </div>	<div data-bbox="565 304 954 583" data-label="List-Group"> <ul style="list-style-type: none"> (2) Inhaled or "snorted". (3) Orally, in capsule or tablet form. (4) Injected. (5) Transdermal absorption. </div> <div data-bbox="516 898 885 1035" data-label="Section-Header"> <p>d. General Indicators of Dissociative Anesthetic influence that may be present:</p> </div> <div data-bbox="565 1071 898 1522" data-label="List-Group"> <ul style="list-style-type: none"> (1) Blank stare (2) Loss of memory (3) Perspiring (4) Warm to touch (5) Slow, slurred speech (6) Cyclic behavior (7) Easily agitated (8) Rigid muscle tone (9) Disorientation (10) Non-responsive (11) Chemical odor (12) Slow to respond to instructions </div> <div data-bbox="516 1564 922 1627" data-label="Section-Header"> <p>e. Other conditions that may cause similar symptoms.</p> </div> <div data-bbox="565 1669 833 1701" data-label="List-Group"> <ul style="list-style-type: none"> (1) mental disorder </div>	<div data-bbox="1003 552 1425 861" data-label="Text"> <p>Point out: Liquid PCP is especially dangerous because it can be absorbed through the skin. Extreme caution should be used when handling the suspect's possessions, because liquid PCP is frequently stored in eye dropper or perfume type bottles.</p> </div> <div data-bbox="1003 1213 1385 1318" data-label="Text"> <p>Suspect alternates between periods (or cycles) of intense agitation and relative calm.</p> </div> <div data-bbox="1003 1669 1336 1806" data-label="Text"> <p>Solicit student questions concerning indicators of Dissociative Anesthetic influence.</p> </div>
<div data-bbox="191 1879 386 1906" data-label="Page-Footer"> <p>HS 178B R2/06</p> </div>	<div data-bbox="776 1879 849 1906" data-label="Page-Footer"> <p>VI-12</p> </div>	

Aids	Lesson Plan	Instructor Notes
<div data-bbox="224 285 289 352"></div> <div data-bbox="191 373 357 405">30 Minutes</div> <div data-bbox="203 632 365 716"></div> <div data-bbox="191 758 305 825">Display VI-16</div> <div data-bbox="203 1304 365 1388"></div> <div data-bbox="191 1423 305 1491">Display VI-17</div> <div data-bbox="191 1877 386 1908">HS 178B R2/06</div>	<div data-bbox="430 304 727 336">E. Narcotic Analgesic</div> <div data-bbox="462 373 906 478">Narcotic Analgesic relieves pain, but also induces euphoria, alters mood and produces sedation.</div> <div data-bbox="462 516 933 1770"> <ol style="list-style-type: none"> 1. The most familiar Narcotic Analgesic is heroin. 2. Other Narcotic Analgesics include: <ol style="list-style-type: none"> a. Opium b. Morphine c. Codeine d. Dilaudid e. Demerol f. Methadone g. Darvon h. Oxycontin 3. In general, people under the influence of Narcotic Analgesic tend to be very slow, with deliberate movements, unable to concentrate and slow to respond. 4. Expected Results of Roadside Observations/Indicators of Impairment <ol style="list-style-type: none"> a. Psychophysical <ol style="list-style-type: none"> (1) Divided attention impairment. (2) Poor coordination and balance. (3) Slowed internal clock. </div>	<div data-bbox="1003 898 1435 1003">Used as a substitute for heroin addicts undergoing therapy and treatment.</div>

Aids	Lesson Plan	Instructor Notes
<div data-bbox="207 982 370 1066"></div> <div data-bbox="191 1140 305 1213">Display VI-18</div> <div data-bbox="207 1266 370 1350"></div> <div data-bbox="191 1381 305 1455">Display VI-18A</div>	<div data-bbox="516 373 954 793"> <p>b. Eye Indicators of Narcotic Analgesic Influence.</p> <ul style="list-style-type: none"> o HGN will not be present o Vertical nystagmus will not be present. o Pupil size will be constricted. o Eyelids will be droopy. </div> <div data-bbox="516 972 857 1213"> <p>c. Methods of ingestion.</p> <ul style="list-style-type: none"> (1) Injected (2) Smoked (3) Snorted (4) Orally (5) Suppositories </div> <div data-bbox="516 1245 954 1707"> <p>d. General Indicators of Narcotic Analgesic influence that may be present:</p> <ul style="list-style-type: none"> (1) "Track marks" (2) "On the nod" (3) Slowed reflexes (4) Slow, low, raspy speech (5) Facial itching (6) Dry mouth (7) Euphoria (8) Pupils constricted (9) Flaccid muscle tone </div>	<div data-bbox="1003 762 1425 930"> <p>Suspect may appear to be asleep, but he or she may hear everything that is said. This condition is commonly referred to as "on the nod".</p> </div> <div data-bbox="1003 1602 1393 1707"> <p>Solicit student questions concerning indicators of Narcotic Analgesic influence.</p> </div>
HS 178B R2/06	VI-14	

**20 Minutes****Display**
VI-19**Display**
VI-20**F. Inhalants**

1. Inhalants are breathable chemicals that produce mind-altering results.
 - a. Inhalants vary widely in terms of the chemicals involved and the specific affects produced.
 - b. Depending on the nature of the particular inhalant, the effects produced may be similar to those of stimulants, depressants or hallucinogens.
2. Inhalants category contains substances such as:
 - a. gasoline
 - b. glues (Toluene)
 - c. paint
 - d. hair spray
 - e. anesthetic gases
3. In general, people under the influence of an Inhalant exhibits effects that are similar to alcohol intoxication.
4. Expected Results of Observations/Indicators of Impairment
 - a. Psychophysical
 - (1) Divided attention impairment
 - (2) Poor coordination and balance



**Display
VI-21**



**Display
VI-21a**


- b. Eye indicators of Inhalant Influence
 - o HGN will generally be present
 - o Vertical Nystagmus may be present (with high doses for that individual)
 - o Pupil size may be normal or dilated depending on the inhalant used.

c. Methods of Ingestion



- (1) Inhaling by breathing fumes
- (2) Some are ingested directly from source
- (3) Some inhalants are soaked into rags, handkerchiefs, twist lock beverage containers, plastic bags or balloons.



- d. General Indicators of Inhalant influence may be present:

The effects of inhalants vary somewhat from one substance to another and are fast acting.

Aids	Lesson Plan	Instructor Notes
<div></div> <div>30 Minutes</div> <div>HS 178B R2/06</div>	<div><div><div>(1) Odor of inhaled substance</div><div>(2) Dizziness and numbness</div><div>(3) Possible traces of substance around face and nose</div><div>(4) Bloodshot, watery eyes</div><div>(5) Distorted perceptions of time and space</div><div>(6) Confused, disoriented appearance</div><div>(7) Light headedness</div><div>(8) Flushed face, possibly sweating</div><div>(9) Intense headaches</div><div>(10) Slow, thick, slurred speech</div><div>(11) Nausea</div><div>(12) Non-communicative</div><div>(13) Floating sensations</div></div><div><div>G. Cannabis</div><div><div>1. The primary psychoactive ingredient in Cannabis is Delta-9 Tetrahydrocannabinol.</div><div><div>a. THC is found principally in the leaves and flowers of the plant, rather than in the</div></div></div></div></div>	<div>Solicit student questions concerning indicators of inhalant influence.</div>

VI-17

Aids	Lesson Plan	Instructor Notes
 <p data-bbox="191 514 305 577">Display VI-22</p>	<p data-bbox="565 304 803 336">stem or branches.</p> <p data-bbox="516 373 893 478">b. Different varieties of Cannabis have different concentrations of THC.</p> <p data-bbox="462 514 876 546">2. The types of Cannabis are:</p> <p data-bbox="516 619 711 651">a. Marijuana</p> <p data-bbox="516 688 678 720">b. Hashish</p> <p data-bbox="516 793 722 825">c. Hashish oil</p> <p data-bbox="516 898 673 930">d. Marinol</p> <p data-bbox="462 966 928 1071">3. In general people under the influence of Cannabis have a difficult time paying attention.</p> <p data-bbox="462 1108 873 1213">4. Expected Roadside Observations Indicators of Impairment</p> <p data-bbox="516 1249 771 1281">a. Psychophysical</p> <p data-bbox="565 1318 857 1381">(1) Divided attention impairment</p> <p data-bbox="565 1423 917 1486">(2) Poor coordination and balance</p> <p data-bbox="565 1528 922 1665">(3) Problems with divided attention tasks, i.e., getting registration, license.</p> <p data-bbox="565 1707 906 1738">(4) Slowed internal clock</p>	
 <p data-bbox="191 1249 305 1312">Display VI-23</p>		<p data-bbox="1003 619 1307 651">- dried leaves of plant</p> <p data-bbox="1003 688 1347 751">- concentrated version of marijuana</p> <p data-bbox="1003 793 1328 856">- liquid extraction from hashish</p> <p data-bbox="1003 898 1331 930">- synthetic form of THC</p>
HS 178B R2/06	VI-18	

Aids	Lesson Plan	Instructor Notes
 <p>Display VI-24</p>  <p>Display VI-24A</p>	<ul style="list-style-type: none"> b. Eye indicators of Cannabis <ul style="list-style-type: none"> o HGN will not be present o Vertical nystagmus will not be present o Pupil size will be dilated or normal c. Methods of Ingestion <ul style="list-style-type: none"> (1) Smoking (2) Orally - baked and eaten in food. d. General indicators of Cannabis influence that may be present: <ul style="list-style-type: none"> (1) Odor of marijuana (2) Impaired perception of time and distance (3) White (conjunctiva) of the eyes are markedly reddish (4) Eyelid and body tremors (5) Disorientation (6) Impairs attention (7) Diminished inhibitions 	<p>Solicit students questions concerning indicators of Cannabis influence.</p>
HS 178B R2/06	VI-19	



10 Minutes



Display
VI-25



Display
VI-25A

H. Drug Combinations

1. The Prevalence of Polydrug Use.

- a. Polydrug use means ingesting drugs from two or more drug categories.
- b. It is actually more common to encounter polydrug users than single drug users.

(1) In the Los Angeles Field Study (1985), 72% of the suspects had two or more drugs in them.

(2) In that study alcohol was often found in combination with one or more other drugs.

(3) But even if we discount alcohol, nearly half (45%) of the Field Study suspects had two or more other drugs in them.

(4) During certification training in New York City, in early 1989, two-thirds (67%) of the suspects evaluated had two or more drugs other than alcohol in their urine.

Point out that 81 of the 173 suspects (47%) in the Los Angeles Field Study had alcohol in combination with one or more other drugs.

Aids	Lesson Plan	Instructor Notes
<div data-bbox="209 327 375 411" data-label="Image"> </div> <p data-bbox="191 447 305 510">Display VI-26</p>	<p data-bbox="516 306 911 369">c. Common combinations of drugs.</p> <ul style="list-style-type: none"> <li data-bbox="570 411 911 443">(1) Cocaine and cannabis <li data-bbox="570 447 878 478">(2) Cocaine and heroin <li data-bbox="570 483 862 514">(3) PCP and cannabis <p data-bbox="516 552 911 688">d. Many of the suspects you will see will be exhibiting the effects of two or more drugs acting together.</p> <p data-bbox="516 726 911 930">e. When two or more drug categories are taken together, they tend to produce a combination of effects: null, overlapping, additive and antagonistic.</p> <ul style="list-style-type: none"> <li data-bbox="570 968 943 1104">(1) Null effect: the drugs have the same effect on the suspects body, e.g. pupil size. <li data-bbox="570 1142 943 1247">(2) Overlapping effect: one drug affects the function but the other does not. <li data-bbox="570 1285 919 1390">(3) Additive effect: action plus the same action reinforces the action. <li data-bbox="570 1428 902 1564">(4) Antagonistic effect: action versus the opposite action, can't predict the outcome. <p data-bbox="464 1602 768 1633">2. Scenario Exercises</p> <p data-bbox="516 1707 695 1738">a. Scenarios</p>	<p data-bbox="1003 306 1382 338">Referred to as a "speedball".</p> <p data-bbox="1003 552 1425 657">Point out that virtually any possible drug combinations will be found.</p> <p data-bbox="1003 1428 1425 1533">Solicit students' comments and questions about the prevalence of polydrug use.</p> <p data-bbox="1003 1602 1417 1665">Assign the students to work in three-member teams.</p> <p data-bbox="1003 1707 1417 1843">Direct the students' attention to the 8 scenarios in their student manuals. Instruct the students that they have 10</p>

Aids	Lesson Plan	Instructor Notes
	<p data-bbox="516 478 881 510">b. Discussion of Scenarios</p> <p data-bbox="464 619 852 651">3. Cumulative Drug Matrix</p> <p data-bbox="516 688 943 825">a. The Matrix outlines the expected results of the roadside examination of the suspect.</p> <p data-bbox="428 863 829 894">I. Medically Impaired Person</p> <p data-bbox="464 932 943 1037">1. Most agencies have policies and procedures to deal with the medically impaired person.</p>	<p data-bbox="1003 306 1422 443">minutes to read the scenarios and determine the category or categories that is applicable for each one.</p> <p data-bbox="1003 480 1357 585">Critique and correct the students' analysis of the categories, as appropriate.</p> <p data-bbox="1003 623 1403 760">The Matrix summarizes what we usually see but doesn't guarantee we will always see exactly that.</p> <p data-bbox="1003 932 1292 963">Segment I: Minutes</p> <p data-bbox="1003 1001 1403 1106">Encourage students to review their agencies policies and procedures.</p>

INDICATORS CONSISTENT WITH DRUG CATEGORIES							
	DEPRESSANT	STIMULANTS	HALLUCINOGEN	DISSOCIATIVE ANESTHETICS	NARCOTIC	INHALANT	CANNABIS
HGN	PRESENT	NONE	NONE	PRESENT	NONE	PRESENT	NONE
VERTICAL NYSTAGMUS	PRESENT (HIGH DOSE)*	NONE	NONE	PRESENT	NONE	PRESENT (HIGH DOSE)*	NONE
PUPIL SIZE	NORMAL(1)	DILATED	DILATED	NORMAL	CONSTRUCTED	NORMAL(2)	DILATED(3)

* high dose for that particular individual

FOOTNOTE:

These indicators are those most consistent with the category, keep in mind that there may be variations due to individual reaction, dose taken and drug interactions.

1. SOMA, Quaaludes usually dilate pupils.
2. Normal but may be dilated.
3. Pupil size possibly normal.

MAJOR INDICATORS	CNS DEPRESSANTS	CNS STIMULANTS	HALLUCINOGENS	DISSOCIATIVE ANESTHETICS	NARCOTIC ANALGESICS	INHALANTS	CANNABIS
GENERAL INDICATORS	Uncoordinated Disoriented Sluggish Thick, slurred speech Drunk-like behavior Gait ataxia Drowsiness Droopy eyes Fumbling <u>*NOTE:</u> With Methaqualone, pulse will be elevated and body tremors will be evident. Alcohol and Quaaludes elevate pulse. Soma and Quaaludes dilate pupils.	Restlessness Body tremors Excited Euphoric Talkative Exaggerated reflexes Anxiety Grinding teeth (bruxism) Redness to nasal area Runny nose Loss of appetite Insomnia Increased alertness Dry mouth Irritability	Dazed appearance Body tremors Synesthesia Hallucinations Paranoia Uncoordinated Nausea Disoriented Difficulty in speech Perspiring Poor perception of time & distance Memory loss Disorientation Flashbacks <u>NOTE:</u> With LSD, piloerection may be observed (goose bumps, hair standing on end)	Perspiring Warm to the touch Blank stare Very early angle of HGN onset Difficulty in speech Incomplete verbal responses Repetitive speech Increased pain threshold Cyclic behavior Confused agitated Hallucinations Possibly violent & combative Chemical odor "Moon walking"	Droopy eyelids ("ptosis") "On the nod" Drowsiness Depressed reflexes Low, raspy, slow speech Dry mouth Facial itching Euphoria Fresh puncture marks Nausea Track marks <u>NOTE:</u> Tolerant users exhibit relatively little psychomotor impairment.	Residue of substance around nose & mouth Odor of substance Possible nausea Slurred speech Disorientation Confusion Bloodshot, watery eyes Lack of muscle control Flushed face Non-communicative Intense headaches <u>**NOTE:</u> Anesthetic gases cause below normal blood pressure; volatile solvents and aerosols cause above normal blood pressure.	Marked reddening of conjunctiva Odor of marijuana Marijuana debris in mouth Body tremors Eyelid tremors Relaxed inhibitions Increased appetite Impaired perception of time & distance Disorientation Possible paranoia

SCENARIO I

While checking an interstate rest area, you notice a vehicle parked, engine running, with the driver apparently sleeping. After awakening the driver, who claims she was not sleeping, you notice that her actions are very slow and lethargic. There is no odor of alcoholic beverage on this person's breath and she states she has not been drinking. As you administer the standardized field sobriety tests, you observe that there is no Horizontal Gaze Nystagmus and no Vertical Nystagmus. You also observe that her pupils are extremely small and the eyelids are droopy. As the driver is performing the walk and turn and one leg stand tests, her movements are slow. Administration of the Romberg test disclosed that the subject has a slow internal clock.

SCENARIO II

On a Saturday evening following a concert, you stop a vehicle for weaving down the street. During the initial conversation with the subject you notice that he is talking very rapidly, has extremely large pupils and is paranoid. The subject states that he was trying to avoid the large snails that were on the road. There is no odor of an alcoholic beverage on this person's breath. As you administer the standardized field sobriety tests, you observe that there is no Horizontal Gaze Nystagmus and no Vertical Nystagmus. As the driver is performing the walk and turn and one leg stand, his movements are fast, then slow, then fast again; and was having difficulty dividing attention. Administration of the Romberg test discloses that the subject has a fast internal clock and goosebumps. After the Romberg test the subject stated that he was confused by the loud noise coming from the Police Officer's raincoat.

SCENARIO III

It is August, you arrive on the scene of a serious traffic crash. You notice that the driver is wearing a long sleeve shirt and different smelling smoke escapes from the vehicle. He is not able to stay awake but is able to answer your questions. The sleeve of his shirt slides up and you notice red marks on his arms. He has no Horizontal Gaze Nystagmus and no Vertical Nystagmus. As the driver is performing the walk and turn and one leg stand tests, his movements are slow and deliberate. Administration of the Romberg test disclosed that the subject has a slow internal clock. His eyes are reddish and pupils appear to normal.

SCENARIO IV

On a Saturday evening following a concert, you stop a vehicle for speeding (70 in a 35). During the initial conversation with the subject you notice that she is talking very rapidly, has extremely large pupils and is anxious. There is no odor of an alcoholic beverage on this person's breath. As you administer the standardized field sobriety tests, you observe that there is no Horizontal Gaze Nystagmus and no Vertical Nystagmus. As the driver is performing the walk and turn and one leg stand, her movements are fast. Administration of the Romberg test discloses that the subject has a fast internal clock and muscle tremors.

SCENARIO V

You receive a call to back-up a fellow officer who has stopped a vehicle and is now wrestling with the operator. Upon arrival, you observe that the subject is naked (the temperature is thirty degrees). He appears to be somewhat cooperative but non-communicative. There is no odor of alcoholic beverage on this person's breath. As you administer the standardized field sobriety tests, you observe that there is Horizontal Gaze Nystagmus with immediate onset and Vertical Nystagmus. As the driver is performing the walk and turn and one leg stand tests, his movements are slow and rigid. He was having difficulty dividing attention. Administration of the Romberg test discloses that the subject has a slow internal clock. His skin is warm to the touch.

SCENARIO VI

You have responded to a one car property damage crash. In your initial conversation with the operator you observe him to be drowsy. There is no odor of alcoholic beverage on this person's breath. As you administer the standardized field sobriety tests, you observe that there is Horizontal Gaze Nystagmus and Vertical Nystagmus. As the driver is performing the walk and turn and one leg stand, his movements are slow and his muscle tone appears flaccid. Administration of the Romberg test discloses that the subject has a slow internal clock. The subject's pupils appeared normal in size.

SCENARIO VII

You receive a call to assist a local officer and he explains that he stopped the vehicle for obvious driving impairment. The driver displayed numerous clues and indicators of impairment during the SFSTs. However, he did not demonstrate any clues in Horizontal Gaze Nystagmus or Vertical Nystagmus. Larger than normal pupils and noticeable fluttering eyelids during the Romberg were detected. His internal clock was slowed to 60 seconds. The whites of his eyes appear reddish. He seems totally unconcerned with the thought of possibly being arrested.

SCENARIO VIII

You stop a vehicle for running a red light. As you observe the driver, he is slow to respond, perspiring, and is easily agitated. As the subject is performing the walk and turn and one leg stand, you observe that the subject is very rigid and is having a difficult time dividing attention. He has Horizontal Gaze Nystagmus and Vertical Nystagmus. His eyes are reddish and pupils are larger than normal. Administration of the Romberg test disclosed that the subject has a distorted internal clock.

SCENARIO ANSWER KEY

Scenario I	Narcotic Analgesics
Scenario II	Hallucinogens
Scenario III	Narcotic Analgesics and Cannabis
Scenario IV	Stimulants
Scenario V	Dissociative Anesthetics
Scenario VI	Depressants
Scenario VII	Cannabis
Scenario VIII	Dissociative Anesthetics and Cannabis